

Amendments to the Claims

Claim 1 (**Currently Amended**) An apparatus for playing back an optical disk having a groove, which includes a main information region in which ciphered data information is recorded in the groove, and a subaltern information region for recording disk control information including key information for deciphering the data information,—which ~~comprises the apparatus comprising:~~

protective condition judging means for judging whether or not the data information is protected by a copyright ~~or not~~ on the basis of the disk control information when the data information is played back;

a disk judging means for judging whether or not the optical disk is writable ~~or not~~ on the basis of ~~other~~ information other than the disk control information when the data information is played back; and

a disk playback preventing means for preventing the optical disk from being played back if ~~it is judged the protective condition judging means judges~~ that the data information is protected by the copyright ~~by the protective condition judging means~~ and ~~it is judged the disk judging means judges~~ that the optical disk is writable ~~by the disk judging means~~.

Claim 2 (**Original**) The apparatus for playing back the optical disk according to claim 1, wherein the optical disk is a write-once optical disk.

Claim 3 (**Original**) The apparatus for playing back the optical disk according to claim 2, wherein the disk playback preventing means prevents the optical disk from being played back by preventing the data information from being deciphered.

Claim 4 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 1, wherein the disk judging means detects whether or not the groove is provided with a wobble ~~or not~~, and then judges that the optical disk is writable if the wobble is detected.

Claim 5 **(Currently Amended)** The apparatus for playing back the optical disk according to claim 1, wherein the disk judging means detects whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and then judges that the optical disk is writable if the sub-groove portion is detected.

Claim 6 **(Currently Amended)** The apparatus for playing back the optical disk according to claim 1, wherein the disk judging means detects whether or not another subaltern information region provided on the optical disk, which is different from ~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if the code is detected.

Claim 7 **(Currently Amended)** The apparatus for playing back the optical disk according to claim 1, wherein the disk judging means detects at least one of whether or not the groove is provided with a wobble ~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and whether or not another subaltern information region provided on the optical disk, which is different from ~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if at least one of the wobble, the sub-groove portion and the code is detected.

Claims 8-10 **(Canceled)**

Claim 11 **(Currently Amended)** An optical disk of writable type comprising:

a main information region for recording ciphered data information, the data information being recorded in a recording layer within a groove extending along a spiral track, ~~in such a manner that the data information can be read~~ is readable using light;

a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region; and

a second subaltern information region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, wherein

a disk control information recorded in a subaltern information region of a read only optical disk is prevented from being copied to the first subaltern information region of the optical disk, by dividing disk control information including key information for deciphering the data information into two parts, and recording a first of the two parts in the first subaltern information region and a second of the two parts in the second subaltern information region, respectively.

Claim 12 **(Original)** The optical disk according to claim 11, wherein the optical disk is a write-once optical disk.

Claim 13 **(Original)** The optical disk according to claim 12, wherein the disk control information including the key information for deciphering the data information is recorded in the first subaltern information region, while least positional information of the first subaltern information region is recorded in the second subaltern information region.

Claim 14 **(Currently Amended)** The optical disk according to claim 11, wherein the disk control information in the first subaltern information region and the disk control information in the second subaltern information region are formed by ~~means of~~ different recording methods ~~to each other~~.

Claim 15 **(Currently Amended)** The optical disk according to claim 14, wherein the disk control information in the first subaltern information region is formed by ~~means of~~ pre-pits.

Claim 16 **(Currently Amended)** The optical disk according to claim 14, wherein the disk control information in the second subaltern information region is formed by ~~means of~~ a laser trimming process.

Claim 17 (**Currently Amended**) An optical disk of writable type comprising:

a main information region for recording ciphered data information, the data information being recorded in a recording layer within a groove extending along a spiral track, ~~in such a manner that the data information can be read~~ is readable using light;

a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region; and

a second subaltern information region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, wherein

disk control information recorded in a subaltern information region of a read only optical disk is prevented from being copied to the first subaltern information region of the optical disk or to the main information region of the optical disk, by providing a sub-groove portion, which connects a predetermined portion of the groove to an adjacent portion of the groove, in the first subaltern information region.

Claim 18 (**Original**) The optical disk according to claim 17, wherein the optical disk is a write-once optical disk.

Claim 19 (**Currently Amended**) A method of preventing an illegal use of an optical disk having a groove, which includes a main information region in which ciphered data information is recorded in the groove, and a subaltern information region for recording disk control information including key information for deciphering the data information, ~~which comprises the steps of~~ the method comprising:

judging whether or not the data information is protected by a copyright ~~or not~~ on the basis the disk control information when the data information is played back;

judging whether or not the optical disk is writable ~~or not~~ on the basis of ~~other~~ information other than the disk control information; and

preventing the optical disk from being played back if the data information is protected by the copyright and the optical disk is writable.

Claim 20 (**Original**) The method of preventing the illegal use of the optical disk according to claim 19, wherein the optical disk is a write-once optical disk.

Claim 21 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 20, wherein the preventing of the optical disk from being played back is prevented from being played back by comprises preventing the data information from being deciphered.

Claim 22 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 19, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the groove is provided with a wobble ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that the optical disk is writable if the wobble is detected.

Claim 23 (**Currently Amended**) The method of preventing the illegal use of the optical provided with a sub-groove portion which connects a disk according to claim 19, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that the optical disk is writable if the sub-groove portion is detected.

Claim 24 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 19, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not another subaltern information region, which is different from ~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that the optical disk is writable if the code is detected.

Claim 25 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 19, wherein ~~said other~~ the information other than the disk control

information is at least one ~~in such information set~~ of whether or not the groove is provided with a wobble ~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and whether or not another subaltern information region, which is different from ~~said the~~ subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, while and

the judging of whether or not the optical disk is writable judges it is judged that the optical disk is writable if at least one of the wobble, the sub-groove and the code is detected.

Claim 26 (**Canceled**)

Claim 27 (**Currently Amended**) A method of preventing an illegal use of an optical disk of writable type having a main information region for recording ciphered data information which is recorded in a recording layer within a groove extending along a spiral track ~~in such a manner~~ that the data information ~~can be read~~ is readable using light, a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region, and a second subaltern information region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, the method comprising ~~the step of~~:

preventing disk control information recorded in a subaltern information region of a read only optical disk from being copied to the first subaltern information region of the optical disk of writable type, by previously forming ~~the~~ disk control information of the first subaltern information region by ~~means of~~ pre-pits.

Claim 28 (**Currently Amended**) A method of preventing an illegal use of an optical disk of writable type having a main information region for recording ciphered data information which is recorded in a recording layer within a groove extending along a spiral track ~~in such a manner~~ that the data information ~~can be read~~ is readable using light, a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region, and a second subaltern information

region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, the method comprising ~~the step of~~:

preventing disk control information recorded in a subaltern information region of a read only optical disk from being copied to the first subaltern information region of the optical disk of writable type, by providing a sub-groove, which connects a predetermined portion of the groove to an adjacent portion of the groove, in the first subaltern information region.

Claim 29 (Canceled)

Claim 30 (Currently Amended) A method of preventing an illegal use of an optical disk of writable type having a main information region for recording ciphered data information which is recorded in a recording layer within a groove extending along a spiral track ~~in such a manner that the data information can be read~~ is readable using light, a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region, and a second subaltern information region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, the method comprising ~~the steps of~~:

preventing disk control information recorded in a subaltern information region of a read only optical disk from being copied to the first subaltern information region of the optical disk of writable type, by previously forming ~~the~~ disk control information of the first subaltern information region by ~~means of~~ pre-pits;

judging whether or not the data information recorded in the optical disk of writable type is protected by copyright ~~or not~~ on the basis of the disk control information recorded in the first subaltern information region when the data information is played back; and

preventing the optical disk from being played back if the data information is protected by the copyright.

Claim 31 (Currently Amended) A method of preventing an illegal use of an optical disk of writable type having a main information region for recording ciphered data

information which is recorded in a recording layer within a groove extending along a spiral track in such a manner that the data information can be read is readable using light, a first subaltern information region located at an inner periphery side of the optical disk in comparison with the main information region, and a second subaltern information region located at an inner periphery side of the optical disk in comparison with the first subaltern information region, the method comprising the steps of:

preventing disk control information recorded in a subaltern information region of a read only optical disk from being copied to the first subaltern information region of the optical disk of writable type, by providing a sub-groove, which connects a predetermined portion of the groove to an adjacent portion of the groove, in the first subaltern information region;

judging whether or not the data information recorded in the optical disk of writable type is protected by copyright ~~or not~~ on the basis of the disk control information recorded in the first subaltern information region when the data information is played back; and

preventing the optical disk from being played back if the data information is protected by the copyright.

Claim 32 (Previously Presented) The method of preventing the illegal use of the optical disk according to claim 30, wherein the optical disk is a write-once optical disk.

Claim 33 (Currently Amended) The method of preventing the illegal use of the optical disk according to claim 32, wherein the preventing of the optical disk from being played back comprises ~~is prevented from being played back by~~ preventing the data information from being deciphered.

Claim 34 (Currently Amended) The apparatus for playing back the optical disk according to claim 2, wherein the disk judging means detects whether or not the groove is provided with a wobble ~~or not~~, and then judges that the optical disk is writable if the wobble is detected.

Claim 35 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 3, wherein the disk judging means detects whether or not the groove is provided with a wobble ~~or not~~, and then judges that the optical disk is writable if the wobble is detected.

Claim 36 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 2, wherein the disk judging means detects whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and then judges that the optical disk is writable if the sub-groove portion is detected.

Claim 37 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 3, wherein the disk judging means detects whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and then judges that the optical disk is writable if the sub-groove portion is detected.

Claim 38 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 2, wherein the disk judging means detects whether or not another subaltern information region provided on the optical disk, which is different from ~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if the code is detected.

Claim 39 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 3, wherein the disk judging means detects whether or not another subaltern information region provided on the optical disk, which is different from ~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if the code is detected.

Claim 40 (**Currently Amended**) The apparatus for playing back the optical disk according to claim 2, wherein the disk judging means detects at least one of whether or

not the groove is provided with a wobble-~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove-~~or not~~, and whether or not another subaltern information region provided on the optical disk, which is different from-said the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if at least one of the wobble, the sub-groove portion and the code is detected.

Claim 41 **(Currently Amended)** The apparatus for playing back the optical disk according to claim 3, wherein the disk judging means detects at least one of whether or not the groove is provided with a wobble-~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove-~~or not~~, and whether or not another subaltern information region provided on the optical disk, which is different from-said the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not~~, and then judges that the optical disk is writable if at least one of the wobble, the sub-groove portion and the code is detected.

Claim 42 **(Canceled)**

Claim 43 **(Currently Amended)** The optical disk according to claim 12, wherein the disk control information in the first subaltern information region and the disk control information in the second subaltern information region are formed by ~~means of different recording methods to each other~~.

Claim 44 **(Currently Amended)** The optical disk according to claim 13, wherein the disk control information in the first subaltern information region and the disk control information in the second subaltern information region are formed by ~~means of different recording methods to each other~~.

Claim 45 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 20, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the groove is provided with a wobble ~~or not, while~~ and

the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the wobble is detected.

Claim 46 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 21, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the groove is provided with a wobble ~~or not, while~~ and

the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the wobble is detected.

Claim 47 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 20, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not, while~~ and

the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the sub-groove portion is detected.

Claim 48 (**Currently Amended**) The method of preventing the illegal use of the optical disk according to claim 21, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not, while~~ and

the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the sub-groove portion is detected.

Claim 49 **(Currently Amended)** The method of preventing the illegal use of the optical disk according to claim 20, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not another subaltern information region, which is different from ~~said the~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the code is detected.

Claim 50 **(Currently Amended)** The method of preventing the illegal use of the optical disk according to claim 21, wherein ~~said other~~ the information other than the disk control information is ~~such~~ information of whether or not another subaltern information region, which is different from ~~said the~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if the code is detected.

Claim 51 **(Currently Amended)** The method of preventing the illegal use of the optical disk according to claim 20, wherein ~~said other~~ the information other than the disk control information is at least one ~~in such information set~~ of whether or not the groove is provided with a wobble ~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove ~~or not~~, and whether or not another subaltern information region, which is different from ~~said the~~ the subaltern information region, is provided with a code indicating that the optical disk is writable, ~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if at least one of the wobble, the sub-groove and the code is detected.

Claim 52 **(Currently Amended)** The method of preventing the illegal use of the optical disk according to claim 21, wherein ~~said other~~ the information other than the disk control information is at least one ~~in such information set~~ of whether or not the groove is

provided with a wobble~~or not~~, whether or not the subaltern information region is provided with a sub-groove portion which connects a predetermined portion of the groove to an adjacent portion of the groove~~or not~~, and whether or not another subaltern information region, which is different from~~said~~ the subaltern information region, is provided with a code indicating that the optical disk is writable,~~or not, while and~~
the judging of whether or not the optical disk is writable judges it is judged that
the optical disk is writable if at least one of the wobble, the sub-groove and the code is detected.

Claim 53 **(Previously Presented)** The method of preventing the illegal use of the optical disk according to claim 27, wherein the optical disk is a write-once optical disk.

Claim 54 **(Previously Presented)** The method of preventing the illegal use of the optical disk according to claim 28, wherein the optical disk is a write-once optical disk.

Claim 55 **(Previously Presented)** The method of preventing the illegal use of the optical disk according to claim 31, wherein the optical disk is a write-one optical disk.